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[The Article by L. Bilenskaya titled "Luminess Phantom" commented on by Scientific Associate of the Scientific Health and Research Institute of Normal Physiology, Academy of Medical Sciences of the USSR, Victor Ademenko]

THE RIDDLES OF "HIGH OFTEN FREQUENCY" BIOELECTRONICS

For a long time I lived Krasnodar with Semen Davidovich and Valentina Khrisanfovna Kirlian that's my neighbors. While I was still a child I became acquainted with "high often frequency photography" which simply enchanted me. Together with Kirlian we performed a series of experiments, received several authors certificates for patents and published scientific papers... And then I began to work on a dissertation on the mechanism by which "high often frequency" images are obtained. What are the problems which I had to encounter?

Figure 1 shows the schematic for a device for obtaining "high often frequency" photographs (its modification in Fig. 2 is designed for photographing complex surfaces). The capicitor plates between which the electric field are concentrated are connected to a high often frequency oscillator. The plates are covered with dielectrics (the role one of them is played by the photographic film on which the image is obtained); the object is placed between them. The distance between the surface of the latter and the photographic film (the discharge cap) is 10 to 100 μ, while the voltage is 20 to 100 kV. Thus, a high often frequency discharge arises at an electric field intensity of approximately 10^6 V/cm. In general, an electrical discharge, and a high often frequency discharge the more so, is a very complex phenomena. As a result of a study of it many discoveries have been made in physics (for example, the discovery of x-rays). In order to obtain "high often frequency" photographs a special type

of discharge is used--something midway between a corona discharge and a spark discharge.